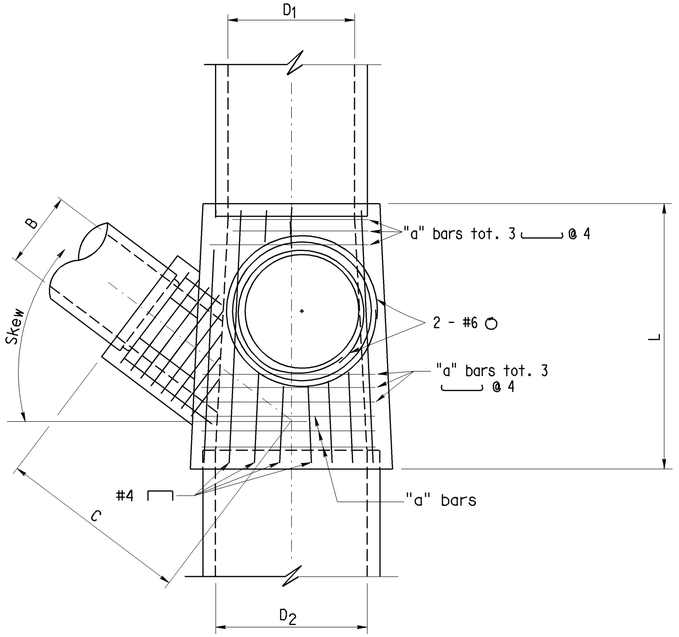
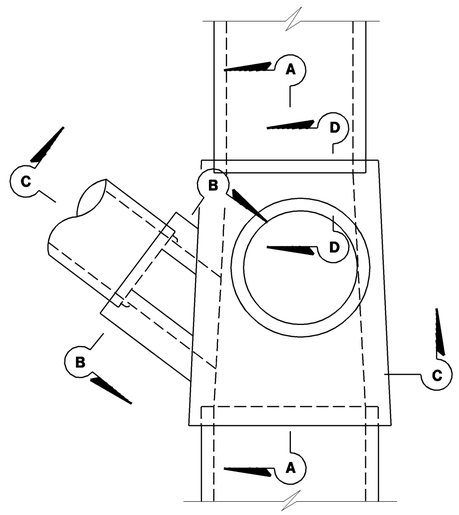
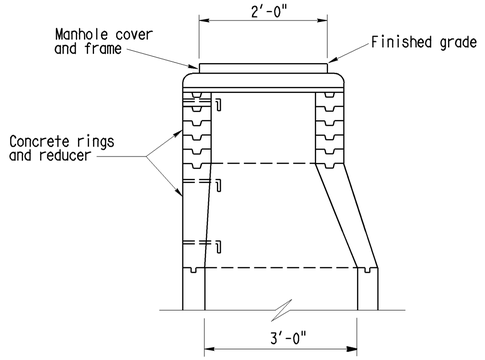


PLAN



PLAN



TYPE MH

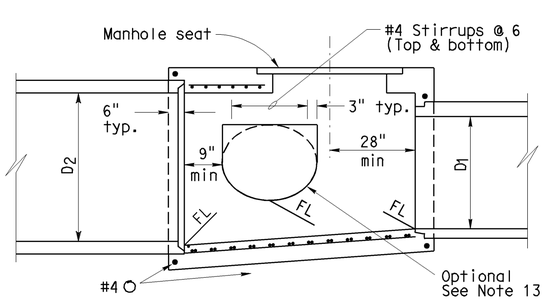
UPPER STRUCTURE

Span	"a" bars	Top and Bottom slab thickness (ts, bs) ✳
3.5′	#4 @ 4"	8"
4.0′	#4 @ 4"	8"
4.5′	#5 @ 5"	8"
5.0′	#5 @ 4.5"	8"
5.5′	#6 @ 5.5"	8"
6.0′	#6 @ 5.5"	9"
6.5′	#6 @ 4.5"	9"
7.0′	#6 @ 4"	9.5"

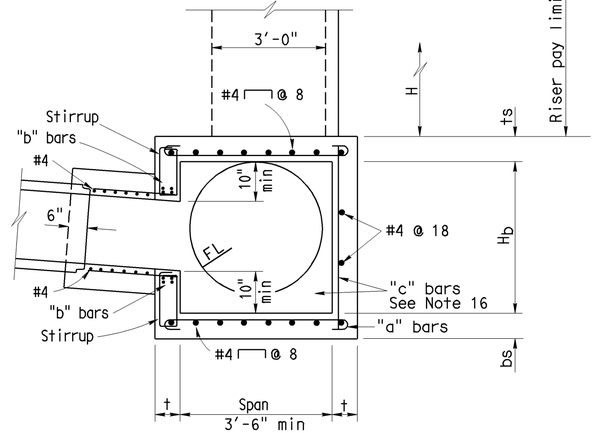
✳ When fill over junction structure is 2′-0" or less, ts shall be increased by 2".

Hb	"c" bars	Sidewall thickness (t)
5.5′	#4 @ 4"	8"
6.5′	#5 @ 4"	8.5"
7.0′	#5 @ 4"	9"
8.0′	#6 @ 4"	9.5"

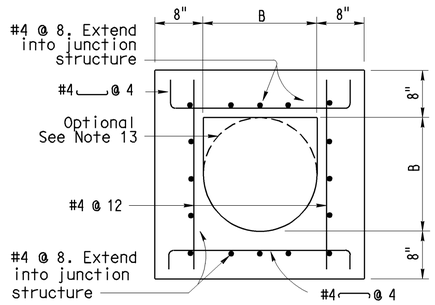
B	"b" bars Top & bottom
2.5′	#5 tot. 4
3.0′	#5 tot. 4
3.5′	#5 tot. 4
4.0′	#5 tot. 4
4.5′	#5 tot. 4
5.0′	#6 tot. 4



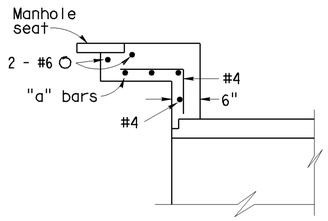
SECTION A-A



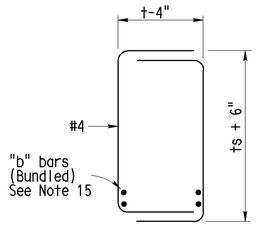
SECTION C-C



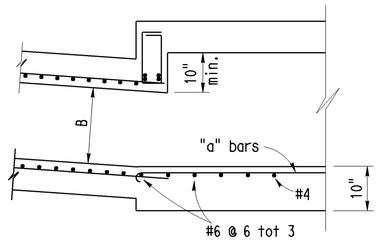
SECTION B-B



SECTION D-D



STIRRUPS



SECTION C-C (OPTIONAL)

Maximum fill height = 8.0′

For reinforcement and details not shown, see Section C-C

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED ENGINEER - CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

DESIGN NOTES

1. Designed in conformance with Bridge Design Specifications (1983 AASHTO Specifications with revisions by Caltrans).
2. Live load: HS20-44 truck. Earth pressures: 140 PCF vertical, 100 PCF horizontal.
3. Unit stresses: f′c = 3600 PSI; fy = 60,000 PSI.
4. Maximum fill height = 20′.

GENERAL NOTES

1. Plans shall designate: inlet and outlet pipe diameters, upper structure or manhole (if required), lateral pipe diameter and skew (if required), C,H, and Hb. Manhole or lateral may be omitted.
2. Upper structure, when required, may be any designated inlet type as shown on Standard Plan D72, D73, D74, D75 or this sheet.
3. Risers shall be positioned to either side of the structure as shown.
4. Each riser shall have a ladder. For details see Standard Plan D93.
5. Thickness of deck shall vary as necessary to provide a level manhole seat.
6. Reinforcing steel shall be placed 2" clear, except as shown.
7. Maximum skew of lateral pipe B is 45°.
8. Lateral may be placed in either side wall.
9. Where D1 and/or D2 are less than 3.5′, clear distance between side walls shall be 3.5′. End walls shall be 6" thick with #4 @ 12" placed both ways.
10. Side walls shall be flush with the inside of the inlet and outlet pipes when pipe diameters are 3.5′ or more.
11. L is 5′-0" minimum.
12. When C is not specified, bring the lateral directly into the wall of the structure.
13. When C is specified, contractor may, at his option, bring the lateral directly into the wall for use as an inside form. A collar conforming with the wall thickness and reinforcement as shown in section B-B shall be poured around the pipe.
14. When lateral is extended directly into the wall, it shall be mitered as necessary to be flush with wall.
15. "b" bars shall extend a minimum of 8" on either side of the opening.
16. Adjacent to each side of the opening, place additional reinforcement equivalent to half the interrupted main reinforcement.

NO SCALE

STANDARD DRAWING					
RELEASE DATE 11/14/05	DESIGN BY PAUL COTTER	CHECKED KENNY KWONG	RELEASED BY		
FILE NO. xs17-010e	DETAILS BY R. YEE	CHECKED PAUL COTTER			
	SUBMITTED BY D. FORESTER	DRAWING DATE 4/99	OFFICE CHIEF		

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.

POST MILE

JUNCTION STRUCTURE

DS OSD 2147A (REV. X/XX/XX)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF

DATE PLOTTED => 08-DEC-2005 TIME PLOTTED => 09:38

USERNAME => rwu

xs17-010e.dgn